

AFTER FINAL Amendment
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Attorney Docket No. 6413.204-US
Ebdrup et al.
Serial No. 10/614,233 Filed July 7, 2003

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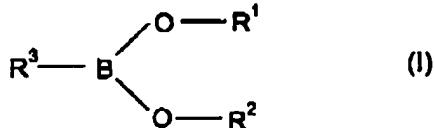
CLAIM LISTING

What is claimed is:

1. (Currently amended) A method of:
 - a) inhibiting the lipolytic activity of hormone-sensitive lipase against triacylglycerols, diacylglycerols, cholesterol acyl esters or steroid acyl esters; and/or
 - b) modulating the plasma level of free fatty acids, glycerol, LDL-cholesterol, HDL-cholesterol, insulin and/or glucose; and/or
 - c) modulating intracellular triacylglycerol and cholesterol ester stores, intracellular level of fatty acids, fatty acid esters, diacylglycerols, phosphatidic acids, long chain acyl-CoA's as well as citrate or malonyl-CoA; and/or
 - d) increasing insulin sensitivity in adipose tissue, skeletal muscle, liver or pancreatic β cells; and/or
 - e) modulating insulin secretion from pancreatic β cells; and/or
 - f) inhibiting male fertility

in a patient comprising, administering to a patient in need of such method a therapeutically effective amount of a boronic acid, an ester thereof, a prodrug thereof,

wherein the boronic acid, an ester thereof or a prodrug thereof is of the general formula I



wherein R^1 and R^2 are independently selected from hydrogen, C₁₋₆-alkyl, C₂₋₆-alkenyl, C₂₋₆-alkynyl, aryl, heteroaryl, C₃₋₈-heterocyclyl and C₃₋₁₀-cycloalkyl, wherein each of C₁₋₆-alkyl, C₂₋₆-alkenyl, C₂₋₆-alkynyl, aryl, heteroaryl, C₃₋₈-heterocyclyl and C₃₋₁₀-cycloalkyl is optionally substituted with one or more substituents independently selected from hydroxy, sulfanyl, sulfonyl, sulfinyl, oxo, thioxo, halogen, amino, imino, cyano, nitro, silyl, boranyl, phosphinyl, selenyl, germyl, C₁₋₆-alkyl, C₂₋₆-alkenyl, C₂₋₆-alkynyl, aryl, heteroaryl, C₃₋₈-heterocyclyl and C₃₋₁₀-cycloalkyl, wherein each of hydroxy, sulfanyl, sulfonyl, sulfinyl, amino, imino, silyl, boranyl, phosphinyl, selenyl, germyl, C₁₋₆-alkyl, C₂₋₆-alkenyl, C₂₋₆-